Professional Training Course

Forecasting for Banking Using Time Series Methods

@FBF_School

27- 29 November 2019

Sala Europa - Villa Schifanoia, Via Boccaccio 121 - Florence

Instructor:

Massimiliano Marcellino | Bocconi University and EUI

Introduction

This course introduces the use of time series methods for modelling and forecasting economic and financial variables relevant in a banking context. Forecasting is a key ingredient of decision making both in the public and in the private sector. It is particularly important in the context of banking, both for their management and for their supervision. Banks' assets and liabilities are influenced by a number of factors, such as general economic and financial conditions, interest rates, and the prices of financial assets. As these variables are the result of a vast, complex, dynamic and stochastic system, forecasting them is very difficult and forecast errors are unavoidable. Yet, forecast errors can be reduced and forecast precision enhanced by using proper econometric models and methods.

Programme

27 November

13.15- 13.30 *Welcome Coffee*

13.30 - 14.00 **Introduction by the Florence School of Banking and Finance and *tour de table***

14.00 - 16.00 **Session 1. Modelling economic and financial variables**

- The main macroeconomic and financial drivers of banking performance
- Using the ARIMA model for economic and financial variables: general issues and assumptions
- Model specification and estimation
- Diagnostic checking

16.00 - 16.30 *Coffee break*

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16.30 - 17.30 **Session 2. Empirical applications in EViews using simulated and actual economic and financial data, possibly provided by the course participants**

17.30 - 18.00 *Transfer by bus to La Divina Enoteca*

18.00 - 19.30 *Wine – Tasting at La Divina Enoteca, Via Panicale, 19/red, Florence*

28 November

09.30 - 11.30 **Session 3. Forecasting economic and financial variables using the ARIMA model**

- Integration and unit root tests
- Forecasting formulae
- Multi-step (or direct) estimation and forecasting
- Permanent-transitory decompositions

11.30 - 12.00 *Coffee Break*

12.00 - 13.00 **Session 4. Empirical applications in EViews using simulated and actual economic and financial data (focus on forecasting and forecasting performance)**

13.00 - 14.00 *Lunch break*

14.00 - 16.00 **Session 5. Modelling and forecasting economic and financial variables using VAR models**

- Model specification, estimation and checking
- Forecasting with VARs
- Impulse response functions and forecast error variance decompositions

16.00 - 16.30 *Coffee break*

16.30 - 17.30 **Session 6. Empirical applications in EViews using simulated and actual economic and financial data (focus on forecasting and shock transmission)**

17.30 - 18.15 *Cocktail in Sala Bandiere, Villa Schifanoia*

18.15 *Transfer by bus downtown (Piazza San Marco)*

29 November

09.30 - 11.00 **Session 7. Cointegration and Error Correction Models**

- Unit roots and spurious regressions
- Cointegration and Error Correction Models
- ECM specification, estimation and checking
- Forecasting

11.00 - 11.30 *Coffee Break*

11.30 - 12.45 **Session 8. Empirical applications in EViews using simulated and actual economic and financial data (focus on cointegration analysis and forecasting)**

12.45 - 13.00 **Closing Remarks**

13.00 *Sandwiches will be served at the end of the session*

Participants

Saioa Armendariz	European Stability Mechanism
Annika Bacher	European University Institute
Amalie Christensen	The Central Bank of Denmark
Ferdinando Cutino	European Central Bank
Alessandra Dionisi	MPS BanK
Jaime Garrido Ceca	Bank of Spain
Oliver Jones	Lloyds Banking Group
Jana Juhaszova	Czech National Bank
Hyekyoung Lee	Bank of Korea
Sabina Monti	Independent Consultant
Rafel Moya Porcel	European Central Bank
Eunjee Noh	Bank of Korea
Cristian Perales Del Moral	European Central Bank
Pauline Perray	Statec - National Institute of Statistics and Economic Studies of Luxembourg
Arry Priyanto	Bank Indonesia
Bianca Sorvillo	Bank of Italy
Rolf Thurner	Swiss National Bank
Aappo Väänänen	Bank of Finland